

## THE ROLE OF BLADDER HYDRODISTENTION AND INTRAVESICAL SODIUM HYALURONATE IN THE TREATMENT OF INTERSTITIAL CYSTITIS

### Hypothesis / aims of study

To evaluate the clinical efficacy of bladder hydrodistention and intravesical sodium hyaluronate in the treatment of interstitial cystitis (IC).

### Study design, materials and methods

21 patients with IC received intravesical sodium hyaluronate therapy under the joint block or intravenous anesthesia. Bladders were perfused with 100cm H<sub>2</sub>O perfusion pressure and expanded for 10min, and then were injected 40mg/50ml sodium hyaluronate through the catheter. After 1h perfusion fluid is released. Perfusion was applied once every week, 4 to 6 times as a course.

### Results

Cystoscopy found 15 patients of typical erythema and small spherical bleeding, 8 cases of the bladder mucosa scattered small fountain-like active bleeding, 4 cases of typical Hunner ulcer. Mucosa and muscle biopsies with 5 patients were only found one case of typical mast cell infiltration. Under anesthesia the average bladder capacity were (191.62 ± 88.67) ml, after bladder expansion, bladder capacity became to (425.33 ± 79.83) ml (P = 0.000). There were 2 suspected bladders rupture after bladder expansion to 6:30 min and 7:10 min. 10min after bladder expansion, there were 19 cases of significantly gross hematuria. After treatment, the catheters of 17 patients were removed at 24h; 2 cases of hematuria removed at 72h; 2 cases suspected bladder rupture removed after 4 days. After catheters were removed, the threshold pain was significantly reduced and the maximum urinary output increase slightly. The day before the second injection of sodium hyaluronate, the frequency of urination decreased significantly than that before treatment, the maximum urinary output increased significantly compared with before treatment, the pain is

reduced significantly than before treatment, O'Leary-Sant IC score and the QOL were significantly decreased (P = 0.000). After 3rd treatment, the symptoms continued to improve; in the fifth week at that time the sixth injection of sodium hyaluronate, the treatment effects is optimal; in 6 months, symptom rebound, but more than that before surgery, there are still statistical significance (P = 0.000).

### Interpretation of results

Bladder hydrodistention under anesthesia for severe intractable PBC / IC patients produces immediate effectiveness; sodium hyaluronic infusion can alleviate frequent urination and pain, the effectiveness and duration of treatment was positively correlated. Bladder hydrodistention combined with therapy of hyaluronic acid infusion showed good recent therapeutic effect. This approach is worthy of clinical use.

### Concluding message

cystitis, interstitial; Hydrodistention; Sodium hyaluronate

### References

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### Disclosures

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